

REMARKS

Status of the claims

Upon entry of these remarks, claims 1, 17, 19 and 26-274 will be pending in this application. New claims 26-274 have been provisionally elected, *with traverse*.

New claims 26-274, which correspond to provisionally elected Group IV (see below) have been added. Support for the newly added claims is found throughout the specification as filed, and no new matter had been introduced.

More particularly, support for new claims directed to using Neutrokin- α polypeptides to treat immune system disorders may be found, for example, on pages 310-366. More particularly, support for new claims directed to using Neutrokin- α polypeptides to treat autoimmune disorders may be found, for example, on pages 20-21 and 333-337. Treatment of rheumatoid arthritis is specifically disclosed for example in the first paragraph of page 336. Support for new claims directed to using Neutrokin- α polypeptides to treat immunodeficiencies may be found, for example, on pages 18-20 and 322-324. Support for new claims directed to using Neutrokin- α polypeptides to treat inflammatory diseases and disorders may be found, for example, on pages 337-338. Support for new claims directed to using Neutrokin- α polypeptides to treat tumors may be found, for example, on pages 18 and 341-342.

Additionally, support for the Neutrokin- α polypeptides used in the methods of treating immune system diseases and disorders, methods of stimulating leukocyte proliferation and methods of enhancing host defenses can be found, for example on pages 14-16, and 219-220 (polypeptides, polypeptide fragments and % identity to polypeptides); pages 125-142 (N- and C-terminal deletions, % identity to N- and C-terminal deletions); pages 70 and 92-93 (heterologous polypeptides including Fc domains); pages 290, 362 and 253-254, 311-312 (labeled polypeptides); pages 80-82 (polypeptides that modulate cell proliferation and differentiation); and pages 310-311 (polypeptides that are cytotoxic to Neutrokin- α receptor bearing cells). Thus, no new matter has been added by way of amendment.

Provisional Election with Traverse

The Examiner has required restriction of the claims into three groups - Group I drawn to a nucleic acid molecule encoding Neutrokin- α protein, a vector, a host cell and a method of making the protein represented by claims 1-16, 21, 23, and 24; Group II drawn to a Neutrokin- α polypeptide represented by claim 17, 18, 20, and 22; and Group III represented by claims 19 and 25 drawn to an antibody to Neutrokin- α . In response, and pursuant to MPEP § 818.02(a), Applicants provisionally elect, *with traverse*, the subject matter of new claims 26-274, drawn to methods of using Neutrokin- α polypeptides for the treating immune system disorders, for stimulating leukocyte proliferation using Neutrokin- α polypeptides, and for enhancing host defenses against infection using Neutrokin- α polypeptides, for further prosecution. Applicants submit that the subject matter of new claims 26-274 while fully supported by the specification as filed, does not fall within the scope of the Groups defined by the Examiner in the Office Action, but nonetheless form a single group of claims (hereafter referred to as Group IV) organized according to the scheme set forth by the Examiner in the Restriction Requirement. Under MPEP § 818.02(a) though, an election may be made by the presentation of original claims. Applicants reserve the right to file one or more divisional applications directed to non-elected groups should the restriction requirement be made final.

Applicants respectfully traverse the restriction requirement. Even assuming, for the sake of argument, that patentably distinct inventions appear in an application, restriction remains improper unless it can be shown that the search and examination of each group would entail a "serious burden" (*see* M.P.E.P. § 803). Applicants disagree with The Examiner's assertion that it would impose an undue burden to examine the nucleic acid, polypeptide, antibody (and method) claims together.

Applicants submit the searching the claims together would ease the Examiner's burden because the searches for the different groups are overlapping. Applicants put forth that a search of the polynucleotide claims would clearly provide useful information for the polypeptide claims. For example, in many, if not most publications, where a published nucleotide sequence contains an open reading frame, the authors also include, as a matter of routine, the deduced amino acid sequence. Thus, the searches for polynucleotides and polypeptides commonly overlap. Even in the relatively uncommon case where a

publication contains a nucleotide sequence which is not accompanied by the corresponding deduced amino acid sequence, it is routine for one to determine the corresponding amino acid sequence. Moreover, a search for Neutrokin- α polypeptides would include, also as a matter of routine, a search for antibodies specific for Neutrokin- α . Similarly, a search for Neutrokin- α polypeptides would include, also as a matter of routine, a search for methods of using Neutrokin- α polypeptides (e.g., subject matter of Group IV newly added claims 26-274). Thus, the search and examination of a polynucleotide, corresponding deduced polypeptide sequences, antibodies specific for the corresponding deduced polypeptide sequences, and methods of using Neutrokin- α polypeptides would not entail a serious burden.

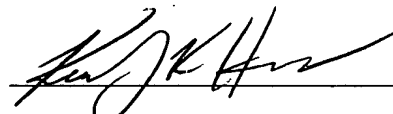
Thus, in view of M.P.E.P. § 803, all of the claims should be searched and examined in the subject application. Applicants respectfully request that the above-made remarks be entered and made of record in the file history of the instant application.

CONCLUSION

Applicants respectfully request that the remarks above be entered and made of record in the file history of the instant application.

Respectfully submitted,

Dated: August 20, 2001

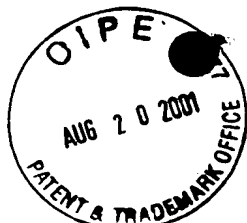


Kenley K. Hoover
Attorney for Applicants

(Reg. No. 40,302)

Human Genome Sciences, Inc.
9410 Key West Avenue
Rockville, MD 20850
Telephone: (301) 610-5771

KKH/MS/cmp



Hand Delivery August 20, 2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Yu et al.

Application No.: 09/589,285

Art Unit: 1646

Filed: June 8, 2000

Examiner: Prasad, S

For: Neutrokin-alpha and Neutrokin-alpha
Splice Variant

Atty Docket No.: PF343P3C4

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Claims 2-16, 18, and 20-25 have been cancelled without prejudice.

New claims 26 to 274 have been added.

Respectfully submitted,

Dated: August 20, 2001

Kenley K. Hoover
Attorney for Applicants

(Reg. No. 40,302)

Human Genome Sciences, Inc.

9410 Key West Avenue
Rockville, MD 20850
Telephone: (301) 610-5771

KKH/MS/cmp